April 19, 2022

# AMD EPYC Processors Deliver Competitive Computing Edge to Mercedes-AMG Petronas Formula One Racing Team

## AMD EPYC™ processors push boundaries in aerodynamic testing, cutting CFD workload time in half by delivering 20 percent improvement for eight-time Constructors' Champions

SANTA CLARA, Calif., April 19, 2022 (GLOBE NEWSWIRE) -- AMD (NASDAQ: AMD) and the Mercedes-AMG Petronas Formula One (F1) Team today showcased how AMD EPYC processors improved aerodynamics testing capacity, contributing to the Mercedes-AMG Petronas team winning its eighth Constructors' Championship in the 2021 racing season. By using AMD EPYC processors, the team was able to achieve a 20 percent performance improvement for computational fluid dynamics (CFD) workloads that were used to model and test aerodynamic flow of their F1 car.

"We are proud to partner with the reigning Constructors' Champions, the Mercedes-AMG Petronas Formula One Team, operating at the cutting edge of racing and technology," said, Dan McNamara, senior vice president and general manager, Server Business Unit, AMD. "For F1 teams, having the most effective computational analysis of aerodynamics can mean the difference between winning and losing a race. With AMD EPYC processors, the Mercedes-AMG F1 team can iterate on vehicle design faster and more efficiently than their previous system."

By using AMD EPYC processors, the Mercedes-AMG Petronas F1 team is pushing the boundaries of what is possible with CFD by developing groundbreaking aerodynamics while delivering the price-performance required to meet budget regulations put in place by the Fédération Internationale de l'Automobile (FIA). Aerodynamics are some of the most complex, technical workloads among F1 teams and require advanced processors and servers to run the analyses and benchmarks. Furthermore, the FIA has developed an intricate framework dictating how much CFD performance and wind tunnel time F1 teams are allowed to use, in an effort to avoid giving an unfair competitive advantage to the teams with more resources.

"AMD EPYC processors offer us a platform that delivers aerodynamic performance day after day at the highest possible level while meeting our goal of faster turnaround time for design iteration," said Simon Williams, Head of Aero Development Software at Mercedes-AMG Petronas F1. "Incredibly, we gained a 20 percent performance improvement over our previous system which has cut our CFD workload time in half. This is a big step compared to the past one or two percent gains seen with previous systems."

AMD and Mercedes-AMG Petronas Formula One Team first announced a multi-year partnership in 2020, combining the two companies' passion for extreme performance. To

learn more about the work AMD and Mercedes-AMG Petronas Formula One Team have done, visit this link.

**Supporting Resources**

- Read the AMD case study here
- Learn more about Mercedes-AMG Petronas
- Learn more about AMD EPYC™ processors
- Follow AMD on Twitter
- Connect with AMD on LinkedIn

**About AMD**

For more than 50 years AMD has driven innovation in high-performance computing, graphics and visualization technologies. Billions of people, leading Fortune 500 businesses and cutting-edge scientific research institutions around the world rely on AMD technology daily to improve how they live, work and play. AMD employees are focused on building leadership high-performance and adaptive products that push the boundaries of what is possible. For more information about how AMD is enabling today and inspiring tomorrow, visit the AMD (NASDAQ: AMD) website, blog, LinkedIn and Twitter pages.

**About Mercedes-AMG Formula One Team**
The Mercedes-AMG Petronas Formula One Team is the works Formula One Team of Mercedes-Benz, competing in the FIA Formula One™ World Championship – the pinnacle of world motorsport and the largest annual sporting series in the world. Based at two world-class technology campuses in the UK, the team designs, develops, manufactures and races the race cars and Hybrid Power Units driven by six-time World Champion Lewis Hamilton and race-winning team-mate Valtteri Bottas. Formula One is a uniquely demanding technical and human challenge, requiring the right alchemy of cutting-edge technologies, high-performance management and elite teamwork to deliver results at 22 Grands Prix around the globe in a race season running from March to December. The Mercedes-AMG Petronas Formula One Team set new benchmarks for F1™ success on its way to winning the Constructors' and Drivers' World Championships in 2014, 2015, 2016, 2017, 2018 and 2019. During those six Championship-winning seasons, the team scored 89 wins, 179 podiums, 94 pole positions, 62 fastest laps and 48 one-two finishes from 121 race starts.

**AMD, the AMD Arrow logo, EPYC, and combinations thereof are trademarks of Advanced Micro Devices, Inc. PCIe is a registered trademark of PCI-SIG Corporation. Other names are for informational purposes only and may be trademarks of their respective owners.**

Contact:
Aaron Grabein
AMD Communications
(512) 602-8950
aaron.grabein@amd.com

Laura Graves
AMD Investor Relations
(408) 749-5467
laura.graves@amd.com



Source: Advanced Micro Devices, Inc.